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EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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THE MANUFACTURE OF QUACKS.

There are quacks in all callings, but we limit these remarks to the individual who practises veterinary medicine and surgery without a diploma. What is the inducement which attracts these men? It is not an easy, idle calling they adopt; it is not a very lucrative one. Then what is the inducement? There is none—they grow or drift into the business. Some because their fathers practised and they succeed to a going concern, some because they were trained to the job by a V.S. and have nothing else to live by when they lose their berth. There are a few hard cases where a young fellow has served a pupilage, gone to College, and before he could qualify the financial failure of parent or guardian has left him incapable of completing his course. With no other training but that which is incompleted, he finds himself compelled to work for a living, and seeks a place as unqualified assistant.

When the 1881 Act was passed nearly a dozen men obtained registration in London who had been acting as "running doctors" for veterinary surgeons, and all ultimately became "quacks"—some of them tolerably good ones.

A little while ago a practitioner, whose unqualified assistant after six years service had left and started for himself, met an old client and asked how it was he had done nothing for him lately. "Oh," said the client "Mr. —— does my work now, and is much nearer my place than you." "But he" said the V.S. "is only a quack." "Yes," was the reply, "I know he is, but so he was when he was with you."

This little tale is instructive, and rather clearly shows the two different views which may be taken by veterinary surgeons and stockowners. The position is not explained by saying that the unqualified assistant to a regular practitioner is under skilled guidance and working under directions, so can be trusted to practise. We know he often acts "on his own," and at any rate is being constantly trained.

Now what is the remedy? Clearly not to put men in a position where their training assists, or almost forces, them to join the ranks of the great army of quacks.

If practitioners, for their own convenience or for their own pecuniary advantage, will persist in employing unqualified men, they are not acting in the best interests of their profession. They are manufacturing quacks, and doing harm to their Body Corporate.

It really seems that the Council of the R.C.V.S. should take some step to mitigate the evil. If members will not do what is best for the profession they should be coerced into better behaviour.

VETERINARY SURGEONS IN PUBLIC LIFE.

Mr. Trigger is not the only veterinary surgeon to receive a mayoralty this year. Mr. Penhale, of Torrington, in North Devon, has been elected Mayor of that town. This is not the only occasion within the last few years on which two widely separated English boroughs have each had a veterinary surgeon as Mayor; Chelsea in the Metropolis and Richmond in Yorkshire were in similar case not long ago. This is a good sign, for it implies an increasing disposition on the part of veterinarians to concern themselves with local public affairs, and a growing recognition by the public of the veterinary surgeon's fitness for civic responsibilities and honours. It may confidently be said that the old prejudice against the veterinary surgeon in public life is now almost a thing of the past. It exists still in some quarters, but it is dying fast; and one of the factors in destroying it has been the manner in which those veterinary surgeons who have taken up public work have discharged their responsibilities; but we are not sure that veterinary surgeons generally yet show that interest in public affairs which is necessary to give the profession its proper position.

Not a few veterinary surgeons now serve upon magisterial benches, local councils, and similar bodies; and some have held office for many years. Still, their number is very small, compared with that of other professions. Making full allowance for the numerical preponderance of medical men over veterinary surgeons, we cannot compare the numbers of the two professions at present engaged in local public life, and feel satisfied with the position of our own members.

Small as our profession is, there are hundreds of veterinary surgeons throughout the kingdom whose personal local reputation would enable them to take up public work at once, if they cared to do so. They could do so with no greater interference with their daily work than is the case with medical practitioners, many of whom take up such duties almost as a matter of course. Most men who do engage in local public life feel amply repaid for their trouble and responsibility by the appreciation of their neighbours, but the veterinary surgeon has the further inducement that if he takes up public work and performs it creditably, he will have done something to place the profession in its proper position in the public estimation. It would be well if more of our members would recognise this.

DEW PONDS.

As so-called dew ponds supply water for animals grazing on down lands, any scientific information regarding the source from which these ponds are fed, cannot but be of interest to country practitioners. In *The Geographical Journal* for August, 1909, and October, 1910, Mr. Edward A. Martin, F.G.S., publishes two very valuable reports of investigations which he has carried out, with the aid of a Royal Society Government Grant, in order to clear up the mystery which appeared to surround the supply of water to these special down-land ponds. It is from these reports that the following notes have been made.

The term dew pond is applied to certain high level ponds, the chief character of which is that, as a general rule, they do not fail to give a supply of water when other ponds at lower levels have dried up. These dew ponds are frequently situated on the very summit of downs, and they are either upon chalk or, if the subsoil is not chalk, a chalk foundation is laid down. The replenishment of these ponds appears to be due to a factor not existing in the case of ponds at lower levels. The latter in spite of being fed by surface drainage, brooks, and ditches, frequently run dry when the so-called dew ponds still contain water.

Typical dew ponds are shallow basins about 10 to 25 yards in diameter, and rarely exceeding 4ft. in depth, with shelving banks 15 to 20 feet in width, sloping down into the pan. The bottom of these ponds consists of puddled clay or chalk, and it is essential that this floor should remain absolutely water-tight if the pond is to hold water. Different methods have been adopted in order to secure impermeability. Usually the floor is formed of broken chalk, puddled clay and straw, laid in super-imposed layers. The topmost layers being usually chalk rubble, which is employed to protect the puddled clay from being pierced by the hoofs of animals. As a rule this chalk is ground to powder and puddled by driving a wagon round and round the pond for a considerable time, and it is also in this way that a leaking pond is frequently repaired. The use of the straw does not appear to be universal, or essential to the satisfactory formation of the floor; but there appears to be a general agreement that lime should be mixed with the clay puddle in order to prevent the working of earth worms.

The name "dew ponds" appears not to have been given to these ponds before the beginning of the 19th century, but it is evident that the ponds were used in very early times; and there are grounds for supposing that they formed the water supply for the ancient encampments, of which traces are to be found on many of the hill tops.

There appears to be no doubt that rain is the chief source of the water in these ponds, and the fact that the higher the ground the greater the average rainfall, explains their elevated situation. Evaporation from the pond surface must be recognised as a source of loss, but this rarely amounts to more than half the total rainfall of the year. In some very carefully conducted inquiries made by Mr. Latham, at Croydon, the average annual amount of evaporation from the surface of similar collections of water was found to be 18·14 inches, whereas the condensation on the surface was not more than ·36 inch, which meant a total net evaporation of 17·22 inches, while the rainfall was about 35 inches, making a balance of 17·22 inches annually in favour of the pond. To this has to be added the rain which may be collected by the pond margin and finds its way into the pond.

In lighter showers the pond is only fed by the rain which actually falls into it or on its immediate margins, the remainder of the rain falling on the sloping bank is soaked up by the ground. In continuous rain the margins quickly become saturated when subsequent rain will run down into the pond. This greatly augments its water supply, as there is practically no loss from evaporation in the water collected by the margins, as it runs directly into the ponds. The rain water is augmented by mist and fog which assist in feeding the pond at the season when the evaporation is the greatest and the rainfall the least, but the extent to which this augmentation takes place appears to be very limited. After an extended enquiry Mr. Edward A. Martin sums up his report as follows:—"Very rarely indeed does dew ever form on the surface of ponds, and rarely, I believe, on the puddled margins; and if we continue to use the term "dew pond," we must remember that the word must be used here in the widest sense as including any form of condensation out of the atmosphere. Rain is undoubtedly the all important replenisher of these, as of all ponds which are not fed by springs." In fact these are mist or rain ponds and not really dew ponds.

The fact that these ponds are chiefly supplied by rain and surface drainage is of interest to the veterinary practitioner, as it accounts for the spread of entozoa, which frequently occurs amongst stock drinking at these places. The analysis of the water taken from dew ponds which have been used by stock shows that they are frequently very foul and have a very high chlorine figure. We would strongly recommend our readers who are interested in dew ponds to read Mr. Martin's lectures and the discussions to which they gave rise.

DIABETES MELLITUS IN THE DOG.

On May 11th, 1909, a cross-bred Welsh terrier was brought to the infirmary with a fractured skull. He had been kicked by a pony on the head, and a small portion of the frontal bone was driven in. This had to be lifted up, as it was pressing on the brain.

For three days the dog was quite delirious. He howled repeatedly, and kept turning round and round from left to right. On one occasion he twisted all the straw in his kennel into a rope, the end of which was fastened round his hind leg above the hock. So tightly was it fastened that the dog had to be muzzled in order to have it cut away. After his delirium ceased, for a long time he did not

understand anything, except that his food was to eat and his water to drink.

Tonics were prescribed, in conjunction with thyroid tabloids, and he slowly recovered, and went home on June 16. His attendant told us some some weeks afterwards that he was still a little peculiar in his manner, and was sometimes savage.

This dog was under treatment two or three times during the following 11 months, but only for common ailments, as eczema, otitis, or worms. On each occasion he seemed to be showing no ill effects of the fracture.

On May 14th, 1910, he was sent in for examination, as his hair was falling out. Dressings were given to the owner and the dog was treated at home. At this time the dog was exceedingly fat.

He was again seen on the 24th June for the same complaint, and his condition was little different.

On the 14th Nov. he was brought again, as he was lame on the left fore leg. The man who brought him said that he was always drinking. and would eat as much as he could get. He was quite bald on the forehead and underneath his body, while the hair on his back was patchy and thin. There was also considerable desquamation of the cuticle.

The case was diagnosed as diabetes mellitus, resulting from the kick and fracture of May 11th, 1909, and which was the cause also of the alopecia, The lameness was due to atrophy of the muscles, and as the dog was painfully emaciated, the prognosis was unfavourable.

On the afternoon of Nov. 17, he commenced to have fits and eventually was destroyed. Unfortunately, no post-mortem examination was allowed to be made.

R. Watts.

Pupil with Mr. W. Noar, Bury.

ABSTRACTS FROM FOREIGN JOURNALS.

A Remarkable Case of Pelvic Fistula in a Mare.

Prof. Hendrickx records the case of a fine heavy draught mare, which was placed under his treatment with the following history. Five weeks previously the mare had had a severe parturitition, a farge foal being presented anteriorly in the vertebro-sacral position with the head and neck deviated greatly to the right. The next day, an enormous swelling of the right buttock, thigh, and leg was present, with considerable œdema extending to the peritoneum, udder, and inferior abdominal region.

Vaginal exploration revealed the existence of a vast hæmatoma invading the whole of the right side of the pelvis; it also revealed a solution of continuity of the right wall of the vagina, which permitted the introduction of three fingers, and was situated about four inches in front of the lip of the vulva. The introduction of the fingers caused a slight flow of blood.

In a few days, a fluctuating point appeared in the swelling below the vulva. This was incised as dependently as possible and gave exit to the blood accumulated in the pelvic hæmatoma; a portion of this blood also escaped by the vaginal wound. When the hand was passed into the vagina to the neck of the uterus and the right aspect of the pelvis was compressed, the flow of blood was considerably augmented.

The swelling of the limb now gradually and rapidly disappeared. The temperature, however, which up to this time had remained almost normal, now began to rise; and coincidently the discharge from the wounds, which had been sero-sanguineous, became distinctly purulent. It was under these conditions that the mare was placed under Hendrickx's treatment.

Upon examination, Hendrickx found the mare's general condition satisfactory. The pulse was 48, the respirations 16, and the temperature 101·6 F. The right half the croup showed an evident muscular atrophy, which was especially pronounced in the middle gluteus muscle.

In the perineal region, 3 1/5th inches below the vulva and a little to the right, was an orifice permitting the introduction of the little finger and continuing upwards and forwards by a course passing behind the posterior border of the ischium and reaching another orifice situated in the vagina. An abundant constant purulent discharge was observed from the perineal orifice, and a similar but much more pronounced discharge from the inferior commissure of the vulva. The discharge was permanent, but was nevertheless sensibly augmented by each movement of the mare.

Vaginal exploration quickly revealed, upon the right wall of the vagina and 3 1/5th inches from the lip of the vulva, a circular wound with indurated edges, easily permitting the introduction of the index finger. From this wound a fistulous sinus took its course directly forwards in the connective tissue of the pelvis. By the use of a caoutchouc probe it was found that the fistula had a depth of 16½ inches, and that, in its anterior portion, it swerved downwards towards the anterior edge of the pubis.

Evidently the lesions had originated as follows. The vaginal wound, produced during the obstetrical operations, had been the direct cause of a discharge of blood into the pelvic connective tissue.

The aseptic resorption of this had been impossible; and the hæmatoma, becoming infected, had soon given rise to a vast purulent sac, the anterior portion of which was situated lower than the vaginal wound. The persistence of the suppuration might be attributed to two causes: either a gangrenous fragment of pelvic connective tissue remaining at the bottom of the fistula without being eliminated, or the existence at the anterior extremity of the sinus of a *cul-de-sac* which, on account of its dependent position, was unable to drain. The idea of a splinter of bone could be excluded, as careful and repeated probing revealed no evidence of any fragment of bone.

The case was serious; for it was impossible to make a counter opening at its anterior extremity, this region being absolutely inaccessible.

Hendrickx accordingly attempted drainage by

means of a caoutchouc tube 22 inches long, which he passed into the fistula and maintained in position by two stitches near the vulva. He hoped thus to facilitate both drainage from within and the introduction of disinfectants from without. First he injected a large quantity of water with the object of removing all purulent flakes adhering to the surface of the cavity, which would have impeded the action of any injected lotions. This done, and finding the tube work perfectly, he proceeded to try the effect in succession of potassium permanganate, hydrogen peroxide, chloride of zinc, and Van Swieten's liquid—continuing each for five or six days, and injecting four times daily. These measures, however, had no great beneficial effect; and after a month of treatment, the purulent discharge was still very abundant both from the vulva and from the perineal wound.

As a last resort, Hendrickx now tried the following mixture;—20 grammes each of white wax and paraffin, 120 grammes of subnitrate of bismuth, and 240 grammes of white vaseline.

This preparation solidifies at ordinary temperatures and becomes very firm in consistence. To inject it, it is necessary to soften it by plunging the vessel containing it into water sufficiently warm to heat the preparation itself to about 113 F. At that temperature it has a syrupy consistence, and may then be taken up into a metal syringe, which itself is heated to about 113 F.

This being done, the author fitted a caoutchouc tube six inches long to the end of the syringe, and plunged it rapidly into the fistula, so as to introduce the agent into the anterior extremity of the sinus. He guarded against immediate expulsion of the mixture by plugging the vaginal wound with gauze. Twenty-four hours later, the course of the fistula had become transformed into a firm cord, constituted by the mixture, which had become sufficiently coagulated at the body heat.

The mare appeared but little incommoded by the operation, only making insignificant expulsive efforts. The previous injections of potassium permanganate and zinc chloride had caused violent straining.

From the day after the injection the purulent flow greatly diminished; but Hendrickx was nevertheless apprehensive as to the ultimate result, fearing that by occluding the posterior part of the fistula he might have dammed up pus still being secreted in the anterior part, entailing a large abscess. No such complication supervened. The general condition continued good, and Hendrickx satisfied himself of the non-appearance of a further anterior abscess by vaginal explorations every four days. The flow of pus gradually diminished, till at the end of twelve days it had totally ceased, while the perineal wound had cicatrised. The mare remained fifteen days more in hospital, without showing the least trace of suppuration. The vaginal wound had completely healed, while vaginal exploration failed to reveal the slightest deformity about the anterior part of the fistula. She was then discharged as cured.

Hendrickx attributes this unexpectedly satisfactory result solely to the injection of bismuth, but is uncertain how the drug produced its effects. Was it a physical effect caused by the layer of bismuth remaining in contact with the walls of the fistula after absorption of the other constituents of the preparation, or was it due to a specific action of the salt upon the pyogenic microbes? The author cannot decide.—*Annales de Méd. Vet.*

[I do not remember seeing a case of the treatment of fistulæ by filling them with bismuth in veterinary surgery before. The method has had some remarkable successes in the human subject; but is not considered unobjectionable.—TRANSL].

THE LESIONS OF LINGUATULOSIS.

Moussu (*Rec. d'Alfort*) details a case of a goat, which was affected with very intense diarrhœa, inducing cachexia. The animal's general condition was very bad, but no pathologic symptom pertaining to the digestive apparatus, other than loss of appetite and diarrhæa, could be discovered; while the thoracic viscera appeared intact. Microscopic examination of the fæces, however, revealed a considerable quantity of the ova of strongyles.

The goat soon died; and lesions of strongylosis were found on post-mortem. In addition to these, other very interesting lesions were found, viz., those of linguatulosis.

Both faces of the liver bore small perforations (which appeared as if made by a punch), without local hæmorrhages, and with orifices of about 1 millimetre (1-25th inch) in diameter. These small orifices would have passed unperceived by a superficial examination, they gave rise to channels of the same diameter, which were lost in the depths of the liver. The diaphragm was similarly affected, appearing as if it had received numerous pricks from a needle, and presenting small circular openings of the same diameter as those upon the liver.

The lungs were free from pneumonia and all other lesions; except that at numerous points upon their surface they showed small sub-pleural hæmorrhagic patches about the size of a fifty-centime piece. All these were almost exactly similar, disseminated irregularly, and presenting at the centre a circular perforation of the pleura leading into a small channel which plunged into the depths of the lung. Some of these hæmorrhagic patches were destitute of these perforations. If the latter were incised and disintegrated, a white semi-transparent vermiform parasite, still living, from two to four millimetres (1-12th to 1-6th inch) in length, with a large head and a thin caudal extremity, was generally discovered. Under the microscope this parasite was easily recognised as a larva of the linguatula.

All the small subpleural hæmorrhages corresponded to the passage (by breaking through the tissues) of one of these larvæ, which were also found in notable quantities upon the surfaces of the viscera and of the serous membranes, and in the sero-hæmorrhagic contents of the cavities.

Moussu observes these lesions several times in the year in the carcases of goats.

It is known that the adult linguatulæ live in the nasal cavities of the dog; while the larval phase is passed in the herbivora, in which, in the case of

slight infestation, the parasites are localised essentially in the mesenteric glands. Matters are otherwise in the case of a massive parasitic invasion; when the parasites, as the present case shows, become generally disseminated and thus cause grave lesions of the viscera and an infection of the great serous cavities which may quickly occasion death.

As the adult linguatulæ live in dogs, and their ova are scattered by the latter upon food stuffs, it is easily comprehensible that linguatulosis will be most frequent and most serious when the herbivora are living in close contact with dogs.—(*Annales de Med. Vet.*)

[This parasite will be better known to some veterinarians under its old name of *Pentastoma tænioides*.—TRANSL.]

W. R. C.

CANKER OF THE SOLE.

Pecus found in the veins of animals suffering from phlebitis and canker of the sole, streptococci similar to those which cause osteomyelitis, and thinks that they may be the cause of a relationship between corneitis and osteomyelitis of the third phalanx.

In 1897 he treated a horse suffering from canker, after the usual surgical treatment had failed, by injecting the antistreptococcic serum of Marmoret and soon effected a cure.

In 1902 he treated a bad case of canker with the serum, and iodide of potassium internally for the sclerosis of the veins, and tannic acid locally; the case was soon cured.

In 1909, he treated a mare on which all treatment had failed, by subcutaneous injections of the serum, 20 grams daily with 5 to 10 grams of potassium iodide, and soon effected a complete cure.

Pecus does not claim to have found a specific, but recommends this treatment as promising and scientific. —*Rec. de Méd. Vét.*

FRACTURED JAW.

A mare was found with her off lower jaw broken, the place of injury was cut down on to and cleaned with oxygenated water, which was the sole dressing used throughout the case, the broken ends were bored and drawn together with galvanised iron wire, the mare was fed on oatmeal and soft food; 15 days later some splinters of bone came away and the suture was removed as union was taking place. In a month she was quite recovered.—*Rev. Gen. de Méd. Vét.*

F. E. P.

NORTH OF IRELAND. VETERINARY MEDICAL ASSOCIATION.

LYMPHANGITIS OF THE HORSE.*

By H. GIBSON, B.A., F.R.C.V.S.

When asked by your energetic and painstaking Honorary Secretary to write a paper for this meeting, I chose this one after due consideration, as likely to give plenty of food for reflection and lead to a good and profitable discussion.

I do not propose to advance any new theories as to causation and treatment, but to give you a few facts which I have observed in dealing with a number of cases during the short time I have been in practice.

* Read before the meeting on Nov. 11.

As Lymphangitis of the horse is a wide subject and the space of time at my disposal comparatively short, I wish to restrict my remarks to the Lymphangitis of plethora, a form which is known under a great variety of names, as Weed, Monday morning disease, Shot of Grease, The Shake, Humour, and Farcy in the ordinary sense as it is used by the layman here in the north. Hence in the purview of my observations I am leaving alone all infective forms, as Traumatic lymphangitis, Cutaneous form of Glanders, Epizootic lymphangitis.

Definition.—A constitutional disturbance of variable extent in the process of assimilation, intimately associated with inflammatory action and œdema of one of the extremities. This inflammatory action first shows itself in connection with the lymphatic glands of the limb, and during the continuance of the disease is most distinctly manifest in these glands and in the course of the absorbents and blood vessels.

This disease is known wherever horses are kept. Although well-bred horses are seldom attacked they are not immune, as we occasionally see them affected. It is found chiefly among the heavy draught horses, with dull, sluggish or lymphatic temperaments, having an abundant growth of hair on their legs which is coarse and wiry instead of long and silky, and a large development of cellular tissue. Usually confined to one hind leg, but occasionally involves both, and sometimes attacks a fore one.

Symptoms.—The symptoms in the disease are clearly divided into two groups: one has reference to the diseased limb, and we will speak of them as Local: the other to the general system, which will call general.

The latter are found in every case, and in fact precede the local manifestations. I have often been called to see a patient in the first stage, where a diagnosis is very difficult, and as we shall see when we treat of diagnosis, it is liable to be confounded with a case of pneumonia.

In the early stages we find the horse shivering violently, pulse frequent, full, and bounding, respirations rapid, laboured and catching. Temperature is always elevated, and may be as high as 106. Mouth hot and clammy. Bowels are as a rule constipated. Auscultation of the abdomen reveals sluggishness of peristaltic movement, or its complete absence. Urine scanty, thick, dark in colour, and of a very high specific gravity.

The horse is off his feed, and has an increased desire for water. In some cases he is very restless and shows signs of slight abdominal pain. There is an anxious expression of countenance with repeated turning of the head and pointing with the muzzle backwards. The rigor is followed by the hot stage, and we may get the body covered with perspiration. These symptoms usually last from 24 to 36 hours, when they gradually subside.

In the majority of cases local symptoms are the first to be observed, and people are inclined to think they make their appearance before the general systemic symptoms. We find the horse, as a general rule, in the morning with a swollen leg, and perhaps holding it off the ground. If you try to push him over in the box or stand he appears to suffer great pain when he puts his weight on it. In some cases the horse appears only slightly lame in movement, and has a peculiar gait with an extraordinary adduction of the limb at each movement. But the diagnostic symptom is to be found in the lymphatics of the limb. The glands are greatly swollen, hot, and very painful to the touch, as is evidenced by the adduction of the limb when you apply slight pressure to it, so much so that he may fall on the other side.

The lymphatic vessels which lead to this gland are greatly swollen, and may be corded. This swelling extends down the course of the vessels as a distinct ridge

to the hock or knee on the inside of limb. Below this the leg is equally swollen on each side.

In some cases the limb assumes enormous proportions having increased to two or three times its normal thickness. The swelling, which is œdematous and retains the imprints of the finger, extends upwards as high as stifle, where it forms a kind of ridge, for this is the limit of the area drained by lymphatics of the leg. Often on running your hand down the swelling on inside of leg you find a serous exudation on the skin of a straw-coloured fluid. Pus formation may take place, but it is the exception rather than the rule. This is chiefly found on the gland or along the course of lymphatics at the valves.

After one attack there is always increased liability to a second, and then we are sure to get a condition of the leg which is spoken of as elephantiasis. The enlargement is permanent, skin rough, and projects in ridges or folds, and is generally dry and scaly.

Diagnosis.—In the inceptive stage, before there is swelling of the extremity, we may find shivering, rapid and laboured breathing, quick pulse, elevated temperature. These are symptoms which may lead it to be confounded with pneumonia. In such cases we should give a guarded diagnosis, and await development—not as the quack, with his lightning diagnosis, declare pneumonia and apply a blister to cause more pain to the poor animal. I have been called to cases where horses have been brutally treated in this manner.

When local symptoms are manifested it is likely to be confounded with any of those diseases in which we find local swelling accompanied by constitutional fever.

(1). *Dropsy.*—We have here the swelling, but if we examine the inside of leg we do not find the tenderness of inguinal glands or corded lymphatics which lead up to them.

(2) *Purpura Hæmorrhagica.*—The swelling in this condition is different. As a rule it is circumscribed, whereas in weed we find it beginning at gland and working downwards. There is also absence of swelling on other parts of body, as head and throat, and of petechial marking on mucous membrane.

(3) *Erysipelas.*—This is put out of account by the sudden onset, high fever, and absence of cutaneous lesions and vesicles.

(4) *Farcy, Cutaneous Form of Glanders.*—Here we have seldom the acute fever, and we find the swelling commencing not from the glands, as in lymphangitis, but from some farcy bud, which is hard, insensitive and prone to ulcerate. Besides, there is probably ulceration of mucous membrane of nose, chronic discharge and swollen glands. In this case if there is any doubt we can always fall back on experimental inoculation, or that diagnostic agent called mallein, which has revolutionised the treatment of this disease.

(5) *Epizootic Lymphangitis.*—This very contagious disease is more likely to be confounded with the last—farcy, but mallein fails to react. On microscopic examination of exudate from any of the ulcers you find the cryptococcus, which is pathognomonic.

(6) *Traumatic Lymphangitis.*—This is due to infection of some sort getting into a wound on the extremity, and the swelling always originates from that point and extends up the leg to infect the gland.

This last is very important, as we know the tendency at the present time is to find a microbic origin for all these diseases. Some go so far as to say that all cases of weed are due to infection in this manner. Perhaps in the near future bacteriological research will have discovered the causal organism of "Monday morning disease," but the balance of available evidence is against this idea, and perhaps if the organism is discovered it will be found to be—as in cases of some other diseases—an ordinary inhabitant of the alimentary tract which has taken on pathogenic properties.

Prognosis.—This, as a general rule, will be favourable, as we seldom see this disease dealing a death blow to any horse. But all the same, it is just as safe to give a prognosis at least a little guarded, as there is always a tendency to recurrence and a liability to the swelling becoming permanent, and the horse will be left to draw an unsightly and cumbrous limb after him for the rest of his days. Besides, it renders him unsound and useless for the majority of purposes for which he is employed.

It is always well to err on safe side, as we can deceive no one if our predictions of recovery is not justified, while if we advise destruction and the animal recovers we are at once discredited.

Physiology.—Before dealing with the treatment of this disease, I think it would be advisable and at the same time profitable to consider briefly the physiology of the lymphatics—one of the most important systems of the animal body. The blood which has been purified in its passage through liver, lungs, etc., is returned to left side of heart, from whence it is driven though the body by the arterial system. The blood is gathered up and brought back by the venous system. But in its passage through the tissues a certain quantity of plasma exudes to be used up by the tissue cells in performing their secretory and other functions.

The surplus of the plasma which gathers in the lymph spaces is the lymph; it is carried by means of lymphatics, passes through the lymphatic glands, recepticulum chyli, and thoracic duct again to the blood stream, which it enters near the heart.

The lymphatic glands are small ovoid bodies interposed along the course of the vessels and through which all the lymph has to pass.

Here, and indeed in any lymph or adenoid tissue, the cells of the lymph are produced, and these pass into the blood to become white blood corpuscles.

We also know that this cell multiplication takes place in inverse ratio with the rapidity of the flow, and as the fibrin ferment is contained in these corpuscles it also must be increased; hence the lymph is more prone to coagulate.

These glands have also a filtering action. Any irritants which may be present in the lymph are brought to a standstill in the fine reticular network of the gland. Hence we can see how any impurity may act with pathogenic effect and produce very grave lesions. The portion of this which interests us most is the lymph flow.

We all know there are no lymph propelling organs to be found in the horse, such as lymph hearts which are present in reptiles and some birds. These are muscular sacs which contract rythmically and drive the lymph forward in much the same manner as the heart proper drives the blood. Since these are wanting in the horse we must look for other powers to propel the lymph. These are divided into two: (*a*) *Vis a fronte*, (*b*) *Vis a tergo.*

Vis a tergo. Muscular contractions in the neighbourhood of the vessels. By this means the vessels are compressed and their contents forced along: return flow is impossible, owing to the very perfect system of valves with which this system is provided. In this connection we have to remember the action of the peristaltic movements in driving on the chyle, as the lymph is here called, when it is loaded with fat globules. There are also some muscular fibres contained in the vessel walls, and these are found chiefly in the large vessels, as recepticulum chyli and thoracic duct.

Vis a fronte is due to the negative pressure produced in the jugular vein by the movements of respiration, hence the lymph is aspirated out of duct into the vessel.

When we consider these two forces, we find that the muscular action is the chief factor in the motor power of this system, and it will greatly help us in our consideration of how best to treat this malady.

UMI

Causation.—I wish to consider this portion in two sections:

Predisposing.—Rest. As we have already seen, the chief motive force of the lymphatic system is to be found in movements, hence anything which prevents or diminishes these forces is likely to have a detrimental effect, for irritants or toxins which may be present in the lymph stream have a better opportunity of showing their pathogenic effects.

Breed. We find that the well bred horses or those of the lighter draught variety are not so liable to it, but it is chiefly found amongst the heavier draught horses of a dull, sluggish, or lymphatic temperament with an abundance of coarse hair on legs.

Exciting.—The pathology of this disease has never been sufficiently studied to get at the true causation of it, but we are able to gather from the clinical history and from our physiological knowledge of the lymphatic system, enough data to warrant us in affirming the conclusion that it is due to dietetic errors of some sort. Remembering preceding remarks on the physiology, we will try and work out a pathology. We have the horse in hard working condition and receiving his usual allowance. A variation occurs—he has not been working, or has received by some means an overfeed, such as getting loose at night and making a raid on an oat bin.

We know that the production of the leucocytes found in the lymph is carried on in the lymph nodes of the adenoid tissue and lymphatic glands, and that the increase of these is in converse ratio with the rapidity of the circulation of the lymph. We also know that these leucocytes contain the fibrin factors which are so essential to coagulation. If, then, the leucocytes are increased the fibrin must also be increased in proportion.

In the ordinary course of events these leucocytee are carried along and pass into the blood stream, but when we have a sluggish action this production is increased and their presence acts as an irritant to the lymphatic gland, which becomes congested, inflamed, and this causes a precipit action of the fibrin which leads to coagulation and embolism in the gland, and this in its turn causes a cessation of the lymph stream in the part drained by the vessels which pass through this gland.

I wish here to try and show you that the seat of the mischief is not always in the limb, but may occur in the abdominal cavity. Noticing the frequency with which symptoms of slight abdominal pain accompany the onset of this malady, and the constipated state of the bowels, I was forced to conclude that, at least in some cases, the seat of the trouble was located here. On auscultation of a number of cases I have found that the peristaltic action of the bowels is very slight, and in some cases inaudible. I also find it quoted by Robertson that in a number of post-mortem examinations he found the abdominal and mesenteric glands enlarged, and infiltrated with a hyaline or gelatinous straw-coloured exudate, together with a quantity of fluid in peritoneal cavity. This, starting in abdominal cavity, extends backwards along the course of lymphatics as far as superior inguinal glands and hence affects the limb, If this were always the case we would expect to have only hind legs affected, and both at the same time, but we know this is not the case, for we sometimes get the trouble in a fore leg, and seldom in both hind legs together.

Treatment.

Preventive.—This is one of the many diseases of horses which can be prevented in the majority of case. if only we pay more attention to hygiene and dieteticss I wish to advocate this evening an old fashioned rule, and one which I think is very serviceable, viz., of giving every horse at least once a week a bran mash to which has been added some Pot. nit. and Mag. sulph. I think Saturday night is very suitable, as a large majority of our horses are in the stable on Sunday. I am also a great believer in the periodic administration of a dose of physic to every horse; it helps to add tone to bowels and remove any impurities that are present.

Another matter which is all important in this connection is the regulation of the diet in all cases of enforced rest, and if this is of any duration exercise in some form should be given.

Lymphangitis of plethora is one of the diseases which in the near future will be greatly reduced when we will find a veterinary surgeon regulating and managing all matters relating to large studs of horses. This is the opening up of the field of preventive medicine towards which at the present time veterinary science and her twin sister has a great tentency.

Curative.—Before going into detail I think I will give you an example of the treatment which is resorted to in some cases by the quack.

During the time I was assistant to our esteemed friend Mr. Thompson, of Lurgan, I received a wire one Tuesday morning to go to see a horse. After a drive of about ten miles in a downpour of rain, I arrived at the place. I found the horse standing in the stable with the near hind leg badly swollen. On making enquires I obtained information that the horse was taken ill on Sunday, and, as on all such occasions, they rushed for the local butcher, who is not afraid to turn his hand to a little quackery. He arrived and, as usual, with a lightning diagnosis he declares the horse has got a "founder," a word which we all know is used in a very wide sense here in North of Ireland. Now reasoning according to his pathology—the layman's pathology—which tries to explain all things in obedience to laws of gravitation, he warns his clients of the probability of the disease falling into the leg and remaining there. First he produces his fleam, perchance his only instrument besides his poleaxe and knives, and abstracts a large quantity of blood. He next prepares a draught, or concoction, or whatever name you like to give it, consisting of a pint of ale, two glasses of gin, saltpetre, glauber salts, cream of tartar, ginger, pepper, butter, etc., etc. He now informs them if they allow the horse to stop walking the disease will settle in his leg. He leaves, with strict orders to walk the horse all night and until he returns in the morning. These orders being faithfully kept, when he arrives he relieves animal of a little more blood, and gives some powders to be given in a mash, and something to be taken in drinking water. At his evening visit he considers the animal still a little plethoric, as he abstracts more blood, and orders the walking to be continued. This latter injunction is obeyed until about two o'clock in the morning when the horse gives up, being completely worn out.

After due consideration, they think it is now time to send for "vet."

On examination I found the mucous membrane anæmic, pulse almost imperceptible, and horse hardly able to stand on his three healthy legs. I need not go into detail of treatment here, suffice it is to say he made a splendid recovery.

From the above I hope you have not formed the idea that I am averse to phlebotomy—an operation which has fallen into bad repute not by its use but by its abuse. It is the course I invariably adopt when I see the horse in the early stages, before there is much swelling in the limb. I need hardly say I always perform the operation on the jugular, as bleeding from the toe—advocated by some—only opens up a road for infection, and perhaps the cure would be worse than the disease. I find that bleeding relieves the blood pressure, and you get far less swelling, and what there is has a tendency to disappear before many days.

In all cases I give a purgative, for which I prefer aloes. Although in most cases the temperature is high, I find that, owing to the sluggish action of the bowels, the animals stand a large dose of aloes, and I have never

seen a case of superpurgation although I have given large doses to horses with temperature as high as 106. Very frequently the purgative will have to be repeated in about four days if the bowels are again constipated, otherwise mild laxatives, such as Mag. sulph., are all that are required, together with dieuretics, such as Pot. nit., Pot. bicarb., and Spt. æther nit.

Now as to local applications. Cold water has been recommended by some, but having tried it on a few cases I find that warm water is more serviceable; it deadens the pain and relieves the tension of the vessels. This is best applied by means of a woollen blanket wrung out of boiling water and applied round the limb as hot as possible. This should be continued for an hour four, or at least three times during the day. After the fomentation I find it is a good plan to rub a little stimulating liniment into the swollen lymphatics on the inside of leg, and finish up by applying a good hay or straw bandage, commencing at the hoof and extending upwards as high as possible. This treatment should be continued until the pain is relieved, when gentle exercise should be given; in fact, in some cases which are not very severe, exercise itself is able to accomplish a cure.

When the pain continues and exercise cannot be given a good hand rubbing should be substituted, the rubbing to be done from below upwards in order to stimulate the circulation of the lymph. When the acute stage has passed off and the trouble has become more or less chronic, I find the administration of K.I. or Biniod. Hg. very useful, also the frequent application of Ung. Iod. together with a good hand rubbing does a lot of good; but when the horse has had frequent attacks I think it useless to try.

I have heard elastic or rubber bandages recommended, but I have not had the opportunity of testing their efficiency.

Should suppuration occur we treat it as an ordinary abscess, by opening and antiseptics.

INTERMITTENT LIMPING.

A condition of intermittent lameness sometimes referred to as "spring-halt" has long been known to occur in horses, and has been found to be due to aneurysmal conditions of the iliac arteries resulting from the presence of parasitic worms. The explanation usually given of the symptoms is that the condition of the vascular supply to the lower limbs is such that, while it is sufficient for the needs of those structures at rest, it is incapable of affording the extra supply required by the muscular exertion of progression. A similar condition has often been described in man under various names, such as intermittent claudication, crural angina, intermittent limping or lameness, and dysbasia angiosclerotica. Charcot in 1856 descaibed a case in man associated with the presence of an aneurysm of one of the iliac arteries. It is, however, to Prof. W. Erb, of Heidelberg, whose researches upon many of the disorders of the neuro-muscular mechanisms are so well known, that we owe the most exhaustive and critical study of the clinical and pathological features of the disease. His original paper was published in 1898, and in it he attributed the condition to anterior-sclerotic changes in the main arteries of the lower limbs. Again, in 1904 he published a further study of the disease based upon 45 cases. Recently he has contributed an interesting analysis of 38 fresh cases, and reviewed the main features of the condition. Several other papers have also appeared upon the same subject during the last few months by Goldflam, Hans Curschmann, and Leopold Fischer. Both Prof. Erb and Dr. Curschmann maintain that it is by no means uncommon, and that in spite of its characteristic symptoms it is often overlooked or wrongly diagnosed. In many English textbooks it is dismissed with but brief reference, and in view of this, fact and of the gaps which still exist in our knowledge of its causation and pathology, it is of some interest to review the chief features which it presents.

The main symptom of this condition is the lameness or difficulty in walking to which it gives rise. After a longer or shorter period, varying from 5 to 30 minutes, sensations of fatigue, stiffness, and cramp supervene, causing the patient to limp and eventually to come to a standstill. After a short rest he may be able to start off again, but is soon again limping and brought to rest by a return of the symptoms. With these motor symptoms there are also associated certain sensory and vaso-motor phenomena, including paræsthesia and pain in the feet and legs, stiffness and painful cramps in the calves, anæmia and coldness of the skin, or sometimes cyanosis, but rarely heat—all these phenomena developing on walking and disappearing with rest. A most important feature in these cases is that the pulse in the dorsalis pedis and posterior tibial arteries is more or less completely suppressed In some cases only one pulse may be wanting, while in others, two, three, or all four may be weak or absent. In some cases they may vary with the condition of the feet, whether warm or cold, or with the condition of the patient. Prof. Erb lays stress upon the importance of investigating these pulses in cases of neuro-muscular disease of the lower extremities, although he admits that it requires time and patience to do so. The vaso-motor phenomena are of considerable interest, the more so in view of the fact that Professor Oppenheim describes a functional or angiospastic form of intermittent limping depending upon vaso-constrictor excitability. This view is approved by Dr. Curschmann, but Prof. Erb and Dr. Goldflam both express doubts as to its existence, and Prof. Erb believes that such cases are really examples of intermittent limping in which the arterio-sclerotic changes are not at first sufficiently marked to be recognisable. He maintains that the vaso-motor phenomena are concomitant symptoms of the condition and denies that they stand in a causal relationship, In the case recorded by Dr. Fischer, soon after the pain in the calf and foot came on, the leg and foot became pale and corpse-like in appearance, owing to a marked ischæmia, which was soon followed by an intense hyperæmia. On walking again this soon gave place to ischæmia, to be again followed by hyperæmia. This case was also of interest in that the condition was unilateral and that the vaso-motor phenomena did not develop until the condition had existed for years, thus supporting Prof. Erb"s contention.

In regard to the etiology of the condition, it is remarkable that it is rare among the poorer classes, the great majority of Prof. Erb's cases having occurred in his private practice, the reasons for this being as yet obscure. It is also comparatively infrequent in women, the proportion varying from 1 woman to 16 or 18 men in certain collected groups of cases. Some statistics also suggest a preponderance of the cases among the Jews, but this is as yet uncertain. The disease usually manifests itself after the fortieth year, but cases occur earlier. Both syphilis and alcoholism appear to play a subordinate part in the production of intermittent limping, but in regard to tobacco there is a general agreement that it is an important causal factor. More than 50 per cent. of Prof. Erb's present series of cases confessed to excessive use of tobacco, and he suggests that tobacco may lead to a localisation of anterior-sclerotic changes in the limb vessels, thus confirming the statements of Goldflam, Strümpell, von Schrotter, and others, that misuse of tobacco is an important cause of arteriosclerosis. Exposure to cold seems also to exert an actual influence upon the causation of the disease, a history of living in cold rooms, of lying on wet ground, or of mili-

tary exercise in snow, occurring in about half of the cases. Diabetes was a co-existing disease in a few of the cases. The influence of bodily and mental overstrain, of neurasthenia and other nervous diseases is as yet obscure, and Prof. Erb suggests that particular attention should be paid to these conditions in recording cases. No doubt in most cases various conditions combine to produce the changes in the vessels leading to intermittent limping, but among them it seems probable that misuse of tobacco plays a predominant part.

The diagnosis of the condition is a matter of considerable urgency, since it is sometimes a precursor of arterio-sclerotic gangrene, and by appropriate treatment this untoward sequel may be prevented. Among the conditions for which it appears to have been mistaken, according to Prof. Erb, are various affections of the spinal cord, neuritis, myositis, venous thrombosis, myasthenia, Raynaud's disease, acroparæsthesia, erythromelalgia, and hysterical and neurasthenic dysbasias. Dr. Curschman describes certain atypical cases in which at first the difficulty in walking became less after further effort. In opposition to Erb and Goldflam, he believes in functional or angiospastic forms of the condition, and describes a case in which symptoms of intermittent limping co-existed with osteomalacia. Treatment directed to the latter condition gave complete relief to the lameness. Prof. Erb also describes two cases of acute arteritis of sudden onset and of idiopathic nature occurring in previously healthy young men—in one case after exposure to cold, in the other without obvious cause. The condition was unilateral in both cases and gave rise to symptoms similar to those of intermittent limping, with absence of the pulse in the arteries of the foot on the affected side. Prof. Erb has not been able to find any similar cases in the literature of the subject. The pathology in all cases seems to be an affection, usually arterio-sclerotic, of the vessels of the lower limbs.—*Lancet.*

Horse Breeding in Devon.

At a meeting early in November of the Devon County Agricultural Association at the Castle, Exeter, Sir Robert Newman presiding, a report of the Registration of Stallions Committee was presented by Mr. Scott Browne. The examination of stallions was conducted by Professor Penberthy, of the Royal Veterinary College, from April 5th to April 8th. He examined 39 stallions, of which 37 passed the examination, and in addition 12 horses were exempt from veterinary examination, making a total of 49 horses which were registered, as compared with 52 last year, comprising 30 shires, 18 thoroughbreds, and one hackney. The registration of mares was receiving steady support, and the number showed an increase again this year. Following the example set in former years, over £200 was now being offered by the various local societies, and the County Association prizes for registered stallions and mares and their progeny. Professor Penberth's report stated that the improvement in type and quality of the animals referred to in the former report had been maintained. These breeders in Devonshire had now at their disposal the services of a considerable number of sires of high class, free from evidence of hereditary unsoundness. It must be gratifying to the initiators and supporters of the scheme to find its successful operations affording a valuable object lesson to the Government on lines it was believed they intended to adopt in an attempt to place the breeding of horses in this country on a more satisfactory basis.

DISEASES OF ANIMALS ACTS 1894 TO 1903, SUMMARY OF RETURNS.

Period.	Anthrax.		Foot-and-Mouth Disease.		Glanders (including Farcy)		Counties Affected	Sheep Scab.	Swine Fever	
	Outbreaks	Animals.	Outbreaks	Animals.	Outbreaks	Animals.	Animals Attacked	Outbreaks	Outbreaks.	Slaughtered. *
GT. BRITAIN. Week ended Nov. 26	22	22			4	17		13	36	416
Corresponding week in 1909 ...	23	24			14	21		27	36	240
Corresponding week in 1908 ...	17	21			11	28	Kent 2	11	42	593
Corresponding week in 1907 ...	19	28			15	22		31	30	161
Total for 48 weeks, 1910	1341	1591	2	15	337	977	London 14 Surrey 1	412	1396	13040
Corresponding period in 1909 ...	1199	1552			509	1702		561	1546	13591
Corresponding period in 1908 ...	1013	1315	3	112	741	2315		732	1935	12704
Corresponding period in 1907 ...	988	1327			794	1795		540	2229	10684

Board of Agriculture and Fisheries, Nov. 29 1910.

	Parasitic Mange (outbreaks)									
IRELAND. Week ended Nov. 19	...	1	...	...	...	...	...	10	2	47
Corresponding Week in 1909 ...	...	...	...	...	...	...	...	13	1	1
Corresponding Week in 1908 ...	...	...	...	...	...	...	...	8	1	5
Corresponding Week in 1907 ...	...	...	...	...	...	...	...	8	2	18
Total for 47 weeks, 1910 ...	7	12	...	...	1	2	63	405	86	1967
Corresponding period in 1909 ...	8	8	...	...	...	...	70	362	87	1562
Corresponding period in 1908 ...	7	10	...	...	...	...	36	325	155	3548
Corresponding period in 1907 ...	3	5	...	...	5	10	72	234	143	2581

Department of Agriculture and Technical Instruction for Ireland (Veterinary Branch), Dublin, Nov. 28 1910.

NOTE.—The figures for the Current Year are approximate only. * As Diseased or Exposed to Infection

A Stock Market Summons—Dismissed.

Horace Stay, a farmer, of West Dean, was summoned for bringing four diseased ewes into Chichester Market on 19th October, Mr. J. A. Morris Bew, who appeared for the defendant, took objection to the information because it did not state the disease with which the animals were supposed to be afflicted. In law, therefore, the information was bad, and he quoted cases in support of his contention. The Bench over-ruled the objection and defendant pleaded not guilty.

William Hopkins, Cattle Market Superintendent, said he saw four ewes in a pen. They were in a very weak and wasting state, and he called Mr. Dawtrey, the veterinary surgeon, to inspect them. He afterwards saw defendant, who said, "I knew they were very bad, but I did not think I was doing any harm in bringing them to the market, as I wanted to get rid of them." Defendant agreed to take them away, and said, "I will take them home and let them die, or have them killed out of the way. I hope there won't be any summoning about this."

By Mr. Bew: Defendant's words were not, "they are not quite up to my standard, so I sent them in."

Inspector A. C. Batten, R.S.P.C.A., said that the ewes were in a very wasted condition, such as no healthy animal could be reduced to.

Sergeant Slade spoke to seeing the arrival of the ewes, one of which reeled as it walked round the pen.

Mr. R. W. Dawtrey, M.R.C.V.S., said the ewes were in a poor, emaciated condition, such as was commonly known among farmers as wasters. One was evidently suffering from lung trouble, and all were evidently suffering from some organic disease. They were in quite an unfit state, and unwholesome animals to be exposed in a public market.

By Councillor Buckell: They were probably all suffering from different organic diseases.

Mr. Bew submitted there was no evidence of what disease the animals were suffering from, and without that proof the prosecution could not succeed. These ewes, not being up to the usual standard, were sent to market as store, and not fat animals.

Mr. Stay quite recognised that every care should be taken in the admission of animals to the market, and he was the last person in the world to send anything in that he thought was diseased or tainted.

The Bench considered the evidence insufficient to convict, and the summons was dismissed.—*Sussex Daily News.*

Slaughterhouses in the City of London.

The Corporation has decided to revise the bye-laws regulating the conduct of the business of cattle slaughtering in the City, which have been in operation without alteration since 1877. The new bye-laws make provision for the humane slaughtering of animals as advocated in the report of the Commission appointed by the Government in 1904 to consider the subject. Each animal must be effectually stunned before being slaughtered, and be securely fastened, and no animal must be slaughtered and no blood allowed to flow in view of another animal. Having regard to the fact that the absence of any restrictions as to the times of slaughtering affords facilities for the improper disposal of any carcases which may be unsound, and that inspection can be most satisfactorily carried out at the time of slaughter when all the organs are available, the Corporation has inserted, with the approval of the Local Government Board, a bye-law to limit the hours accordingly.—*Times.*

Royal (Dick) Veterinary College.

10, Atholl Crescent,
Edinburgh, November 25.

Sir,—Although late through pressure of work, will you permit me through your columns to thank the guarantors of the Scottish National Exhibition for the grant of £2,000 made to the Royal (Dick) Veterinary College, which I need hardly say I greatly appreciate, and will be a great encouragement to the Board of the College?

As I have for many years taken a deep interest in this College, may I take advantage of this opportunity to urge the claims of the College for more general support than it has received? An appeal was issued to the public about the month of March for the sum of £25,000, the Government having agreed to contribute a similar amount towards the £50,000 required for the erection of a new College provided the public did its share. Unfortunately the response to this appeal has been small, amounting only to about £11,000, including the £2,000 generously given by the guarantors of the Scottish National Exhibition.

As the offer of an excellent site at Summerhall for the proposed new College expires at the end of December, it is imperative something should be done at once to raise the necessary amount, to justify the Board in concluding the purchase. For this reason I earnestly appeal to your readers to contribute towards this desirable object; otherwise I greatly fear the proposed scheme will fall through.

The teaching of veterinary science is of great importance to the whole community. It is impossible to stamp out tuberculosis unless a supply of pure milk and sound meat are secured, and this can only be done by having highly trained veterinary surgeons. To carry out this object and help to raise the whole standard of the teaching of veterinary science it is essential a new college be erected near the University. France and Germany are greatly ahead of us in the equipment of their veterinary colleges. The college in Berlin has a staff of twenty-four professors and lecturers, while the Royal (Dick) Veterinary College has but nine.

It may surprise your readers to know that at the present moment no University in Scotland has the right to confer any degree in veterinary science. I, therefore, earnestly appeal to them on patriotic grounds to help to remove what I have no hesitation in describing as a national scandal. Scottish University degrees stand second to none in medical science. Scottish Universities should have similar powers in veterinary science. It is with this object in view I appeal to your readers to help the Dick College to carry out this desirable object by contributing towards the erection of a new college near the University. Any contributions will be gratefully acknowledged by the Secretary to the College, Mr. Robert Anderson, S.S.C., York Place, Edinburgh, or myself.—I am, etc.,

CHARLES E. PRICE.

—*The Scotsman.*

Cruelty to a Dog.

At Bow Street, before Mr. Curtis Bennett, Luigi Ricci porter, employed at an hotel in Gerrard Street, Soho was summoned for ill-treating a dog.

Inspector Lovejoy, of the R.S.P.C.A., said that when he told the defendant that it was alleged that he had cut off a large portion of a dog's tail with a chopper he replied, "Yes, I have done the same thing before."

Mr. Alexander Pearce, veterinary surgeon, said that the dog was about 12 months old. The wound, which was very painful, might take some weeks to heal. The proper time for cutting a dog's tail was two or three days after birth.

The magistrate ordered the defendant to pay a fine of £1 and £1 10s. 6d. costs, and warned him that if the was found doing this kind of thing again he would be sent to prison without the option of a fine. —*The Times.*

Lady and Two Dogs.

ROWLANDS v. GUSH.—This was an action to recover damages for personal injuries. Mr. Henry O'Hagan was for the plaintiff; Mr. P. B. Morle and Mr. Samuel Duncan were for the defendant

It appeared that the plaintiff, Miss Annie E. Rowlands, a lady living at Woodlands Road, Isleworth, on October 5th, 1909, about 6.30 p.m., was going along the footpath of the London Road, Isleworth, in the direction of Hounslow, and according to her case, when she reached the house of the manager to Messrs. Pears, the well-known soap-makers, two Great Dane dogs, belonging to the defendant, Mr. Geoffrey B. Gush, came galloping down the road, leashed together by a chain, which caught the plaintiff and knocked her down, one dog going on one side of her and the other dog going on the other side. The defendant was riding on a tram-car, which the dogs were following, and he came up and did all he could to help the plaintiff. The plaintiff's left leg was broken, she was in bed eight months, and she was still suffering from phlebitis, and could not walk without a stick. The plaintiff alleged that the defendant was guilty of negligence in allowing dogs which were leashed together to run on the highway without control. The defendant denied that he was guilty of any negligence. He said that the dogs were coupled at the collar with an iron couplet so arranged as to be not more than 5in. long, and that they had been trained to follow a tram car in this way. He said that the dogs were under proper control, but that as the tramcar passed under the railway bridge at Isleworth they were frightened by the noise of a train and bolted on to the footpath.

The plaintiff, in cross-examination, said that she was not wearing a hobbled skirt. (Laughter). The dogs were beautiful and she would like to have one of them but not the two. (Laughter).

The Judge: I think that the defendant will have difficulty in showing that it is safer to let dogs run on the highway leashed together than to have them separate.

Mr. Duncan: I have experts here who will say so.

The Judge: Then I shall wait until I see the experts. (Laughter).

The defendant stated that it was one of the dogs and not the chain that hit the plaintiff, and he called experts to say that it was safer to tie the dogs together than have them separate, and that it was a common thing to train them to run behind vehicles.

The jury found a verdict for the plaintiff for £250.

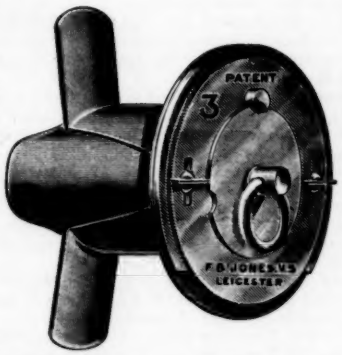
Judgment accordingly.—*The Times.*

Professional (P) Evidence.

A farrier, giving evidence at Wood Green said if every horse that walked on its toes were slaughtered there would be no horses in London.

Tetanus Antitoxin as a Prophylactic.

The beneficent action of anti-tetanic serum is but rarely capable of proof. An observation of G. Lentha Cheatle, communicated to *The British Medical Journal* described the case of a boy admitted to King's College Hospital after receiving a wound in the thigh from a street accident. This was purified and antitoxin administered. Fourteen days later tetanus bacilli in large numbers appeared in the discharge from the wound. The boy, however, exhibited no symptoms of the disease, the antitoxin having effectually protected him. The author thinks that this safe prophylactic measure should be used more generally than is now the case on patients who have met with accidents in which dirt from field, garden, or road has come into contact with the wound.



The Jones Tracheotomy Tube.

In Spain and Portugal wine is sold from houses that are identified by a bush or branch of a tree fixed over the front door. The natives believe that when the wine sold is good customers are sure to find it even without guidance, and so the proverb—"Good wine requires no bush." The wise saying has a wide application, and although all good things are sure of discovery, some one must circulate the good report. Jones' tracheotomy tube requires no "bush." Those who have used it are satisfied, and those who have not, only need try it to find they have got a good thing.

ARMY VETERINARY SERVICE.

Extract from *London Gazette*,
WAR OFFICE, WHITEHALL, Nov. 25

ARMY VETERINARY CORPS.

The undermentioned officers to be Capts., with precedence as in the Unattached List for the Territorial Force:—

Vet.-Capts. R. G. Anderson, C. Baxter. Dated July 8.

To be Lieuts. with precedence as in the Unattached List for the Territorial Force:—

Vet.-Lieuts. J. J. Ridley, F. B. Gresham, W. C. Prudames. Dated July 8.

OBITUARY.

SAMUEL OXTON LANGLEY, M.R.C.V.S., Birkenhead.
Graduated, Lond: Jan., 1879.

Mr. Langley died on November 24th from the results of a trap accident. His age was 56 years

What does B.R.I.R.C. mean? It seems a formidable combination of alphabetical signs. But after all it just means something about hens. Unless you have letters after your name nowadays you don't count.—*Scottish Farmer.*

CORRESPONDENCE.

"OPERATIONS FOR ROARING."

Sir,

In last week's *Record* a letter appeared signed "Perplexed," in reference to the new operation for roaring. I think the writer might have appropriately signed himself "Cock Sure" as he seems to be one of those cynics who have neither the pluck nor ability to try anything in the nature of an experiment, but who love to criticise and who look with a jealous contempt on those "pioneers" who stake their reputations in attempting new methods for the benefit of the world.

"Perplexed" is very anxious to have some definite information as to the success of this new operation, and surely his anxiety for information might have spurred him sufficient to get a "roarer" operated on, or to go and see one done by the "pioneers" or to try it "himself," as he says it is not a difficult operation.

He blatters about "physiology" and wants to know what physiological reasoning ever suggested the operation, and he even says he likes to know "how" things work as well as to know that they do.

'Pon my word, Mr. Editor, if "Perplexed" wants to know exactly how things work I fear he will have to continue in his present state of blissful ignorance.

I regret that I cannot satisfy his cravings for extreme knowledge, but I can give him this much information, that I have had some "roarers" operated on by Prof. Woodruff and by Prof. Hobday, and that they are without any doubt a success, and I know of others who have the same story to tell.

So that "Perplexed" may rest assured the operation has come to stay, and he may as well, as he says, revise his physiology and perhaps his anatomy and muster up courage enough to try, at least for once, and give us the results, then perhaps when "He" has tried the profession may give its final decision.

Hoping my hurried observations may not cause "Perplexed" to be more perplexed, yours,

P. J. Howard, M.R.C.V.S.

Ennis, Nov. 29th.

THE EQUINE SCLEROSTOMES.

Dear Sir,

It is refreshing to see that some of your readers are taking a keen interest in Parasitology, and I send this short note with reference to Mr. Noel Pillers' article on "The so-called Equine Sclerostomes" in *The Veterinary Record* of Oct. 22, 1910,

Mr. Noel Pillers brings Prof. Mettam to task for being somewhat behind the times. I would recommend the following articles to Mr. Noel Pillers and to others interested in the subject.

I. Comptes Rendus de la Société de Biologie, volume 66, p. 85—"Sur la Classification des Strongylidæ," (i) Metastrongylinæ, by Railliet and Henry.

II. Ibid. p. 168, (ii) Ankylostominæ, by Railliet and Henry.

III. "*Bulletin de la Société de Pathologie Exotique*," vol. iii. p. 311—"Quelques Helminthes nouveaux ou peu connus du groupe des Bunostomiens," by Railliet and Henry.

This work is all 1909 and 1910, and I think it is highly probable this new classification will be adopted. There will be found the following:

(*a*) *Family*, Strongylidæ; *Sub-family*, Strongylinæ; *Genus*, Cylicostomeæ; *Sub-genus*, Cylicostomum (Looss); *Species*, Cylicostomum tetracanthum (Mehlis) ("The red worm").

(*b*) *Family*, Strongylidæ; *Sub-family*, Strongylinæ; *Genus*, Ankylostomeæ; *Sub-genus*, Strongylus (Muller); *Species*. Strongylus equinus (Muller) ("the palisade worm").

It is of course quite possible that Mr. Noel Pillers has perused the above articles, and has not adopted the new generic terms.

As regards seeing the specific word in the name erroneously commenced with a capital letter, this *is* permissible when the word takes its specific name from a person, as "Trichostrongylus Axei," but it is optional whether one uses a small or a capital letter in such a case.

In Mr. Wallis Hoare's article, in the same number of *The Veterinary Record*, is mentioned "Strongylus gracilus." This worm according to Railliet and Henry is now "Trichostrongylus Axei."—Yours faithfully,

G. H. Gaiger, Civil Vety. Dept.

Punjab Veterinary College, Lahore.

Nov. 10.

GASTROPHILUS EQUI: AN ENQUIRY.

Sir,

Would any of the subscribers be so kind as to inform me through the medium of your widely read journal if there is an effectual remedy for the removal of the Gastrophilus equi from the stomach of the horse.

I have had several cases which proved fatal, and on post-mortem I found a severe gastritis, the stomach being infested with these parasites.—Yours, etc.,

M.R.C.V.S.

MOTOR CAR AND PETROL TAX.

Sir,

May I remind all members of the profession of the benefit which they will confer on those of their brethren who make use of motor cars in their practices, if they will get a definite undertaking from the candidates in their own Division to urge the Government to look upon us as medical men as regards taxation.—Yours faithfully,

E. R. Holme Woodcock.

Eccleshall, Staffs., Nov. 26.

"GREGGS'S VETERINARY DICTIONARY,"

Sir,

If any veterinary surgeon drops me a note and encloses three penny stamps to cover actual postage, I will see that he gets the first few numbers of above on approval.—Yours faithfully,

James Gregg, M.R.C.V.S.

Victoria Square, Belfast.

A Correction.

Sir,

I notice in your issue of November 19th that I am incorrectly reported to have said at the last meeting of the Liverpool University Veterinary Medical Society that "three-fifths of the lameness in horses is brought on by defective shoeing."

My actual statement was that "three-fifths of the lamenesses of horses are due to diseases of the feet, a large proportion of which are brought on by defective shoeing."

May I ask you to kindly make known this correction through the medium of your paper.—Thanking you in anticipation.—Yours truly,

J. P. Heyes.

Wigan, Nov. 27.

Veterinary Parasitology, by Reginald R. Smythe, M.R.C.V.S., cr. 8vo., xiv. + 130 pp., with 29 illustrations in text, and chart. cl. lettered, 4s. net. Balliere, Tindall and Cox, 8 Henretta Street, London, W.C.

Communications and Papers received:—Messrs. E. R. & H. Woodcock, F. Morton Wallis, T. L. Vaisey, T. D. Taylor, G. H. Gaiger, James Peddie. "Two Students." *East Anglian Daily Times*, *The Scotsman*.

Communications for the Editors to be addressed 20 Fulham Road, London, S.W.